

A New Species of Gall-forming *Bucculatrix* from Florida (Lepidoptera: Lyonetiidae)

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In the Journal of the New York Entomological Society, Volume LVI, March, 1948, pp. 43-50, Dr. James G. Needham published a paper describing the habits and early stages of a new species of gall-forming *Bucculatrix* on *Helianthus agrestis* Pollard from Florida. As Dr. Needham plans to publish further details of the life history, the following description of this new species is published in advance of the writer's forthcoming monograph of the genus *Bucculatrix* in North America in order that the name may become available.

Bucculatrix needhami new species

Head white, tuft brown in the center; antennae pale gray. Thorax white, tegulae shaded with fuscous anteriorly. Fore wings white, marked with irrorated fuscous streaks which may vary in distinctness, or one or more of them be absent. In well-marked specimens, the following markings can be distinguished: a median streak from base broadening outwardly for about one-third the wing length, its broad portion ending before the black patch of slightly raised scales lying just below the fold; above the patch of raised black scales this streak continues as an attenuated line to the middle of the wing; just posterior to the raised black scales, a broad streak, parallel to termen, extends to the end of the cell, meeting a small black spot; costad of the median streak, starting at basal fifth is a narrower streak, its point directed toward the small black spot at end of cell; below this streak there is usually a short fine fuscous line; beginning just beyond and below middle of costa is a more or less broad very oblique streak which extends into the apical area. Apical costal area dusted with fuscous scales. Scattered fuscous dusting along dorsal margin. Scales along termen black-tipped and forming a more or less conspicuous cluster about half-way along the cilia; these scales extend along the

wing margin to the apex, where the dark color is continued as a blackish pencil in the apical cilia. A line of slender finely dark-tipped scales near base of the cilia extends parallel to termen, converging to apex. Hind wings pale gray, cilia rufous at base. Legs white, with fuscous shading, tarsal segments black-tipped. Abdomen whitish.

Alar expanse: 13 to 15 mm.

Type.—♂, Englewood, FLORIDA, March 29, 1946 (J. G. Needham). Gall on stem of *Helianthus agrestis* Pollard. Cornell U. Type No. 3123.

Allotype.—♀, Englewood, FLORIDA, March 24, 1946 (J. G. Needham). Gall on stem of *Helianthus agrestis* Pollard. Cornell U. Type No. 3123.

Paratypes.—3 ♂, 3 ♀, Englewood, FLORIDA, April 5 to April 17, 1946 (J. G. Needham), 1 ♀, Sarasota, Fla., March 24, 1946 (J. G. Needham), all reared from galls on stems of *Helianthus agrestis*; 6 ♂, 3 ♀, 8 mi. W. of Moore Haven, Glades Co., Fla., ex pupa, April 7 to May 17, galls on stems of *Helianthus agrestis* (C. L. Remington & L. Brass.); 1 ♂, 1 ♀, near Hiseville, Barren Co., Ky., imagoes June 3 and June 12, 1941, from galls on stems of *Helianthus angustifolius* L. (A. F. Braun) [A. F. B. Coll.]; 1 ♀, Chicago, Ill., VI. 3. 04 (G. McElhose) [U.S.N.M.]; 1 ♂, Karner, N. Y., April 21, 1903 (N.Y.S. Coll.), "from gall on *Helianthus strumosus*" [U.S.N.M.].

Bucculatrix needhami is one of a group of closely related species, all gall-forming or stem-boring, and characterized by the same general type of genitalia and wing markings, but separated from one another by slight but constant differences. In the forthcoming monograph male and female genitalia, wing markings, gall, and cocoon will be figured.